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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/728,012

12/03/2003

Larry Lynn Williams

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09/15/2006

HITACHI GLOBAL STORAGE TECHNOLOGIES, INC.

5600 COTTLE ROAD, NHGB/0142

IP DEPARTMENT

SAN JOSE, CA 95193

EXAMINER

PATEL, HETUL B

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/728,012

Applicant(s)

WILLIAMS, LARRY LYNN

Examiner

Hetul Patel

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/03/2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This office action is in response to the communication filed on July 21, 2006.
2. Applicant's election without traverse of Group 1, claims 1-8 in the reply filed on July 21, 2006 is acknowledged.

#### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 12/03/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1 and 6-8 are rejected under 35 U.S.C. 102(a) as being anticipated by the 'Background of Invention' section of this application, hereinafter, BOI.

As per claim 1, BOI teaches a storage device (i.e. 200 in Fig. 2) having a lateral storage director (i.e. interface 204 in Fig. 2), comprising: at least one storage medium (i.e. the disk 214 in Fig. 2); at least one recording transducer (i.e. the recording head 212 in Fig. 2) capable of recording data on said storage medium and reading data from

said medium; a storage device controller (i.e. the drive controller 202 in Fig. 2) to control reading data from said storage medium and writing data to said storage medium; wherein said lateral storage director has a capability of communicating with the storage device controller, said lateral storage director is coupled with a communication link (i.e. the SCSI bus or Fibre channel not shown in Fig), and said lateral storage director has a capability of communicating with a lateral storage director of another storage device via said communication link (i.e. the interface of one storage device is capable of communicating with the interface of the other storage device via the SCSI bus or Fibre channel) (e.g. see Fig. 2 and page 9, lines 3-25).

As per claim 6, BOI teaches the claimed invention as described above and furthermore, BOI teaches that the storage device is a disk drive (i.e. 200 in Fig. 2).

As per claims 6-8, BOI teaches the claimed invention as described above and furthermore, BOI teaches that the storage device can be one of a disk drive, an optical drive, a flash memory, a tape drive and the like are used to store most of the digital data in contemporary computer systems (e.g. see page 1, lines 9-11).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over BOI in view of Swidler et al. (USPN: 6,859,846) hereinafter, Swidler.

As per claims 2 and 3, BOI teaches the claimed invention as described above. However, BOI does not teach that the lateral storage director includes a communications link address which may be used to accept a query by a lateral storage director of another disk drive. Swidler, on the other hand, teaches about having a data file table associated with the stored data in the storage device and the data file table stores the identifying information which used to accept a query by a lateral storage director of another disk drive (e.g. see Col. 5, lines 19+). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the current invention was made to implement Swidler's teachings in the storage device taught by BOI. In doing so, data stored in one storage device can be identified by the data file table and can be transferred to other storage device within network.

As per claims 4 and 5, BOI teaches the claimed invention as described above, but failed to teach that the lateral storage director has the capability of determining the available storage space of the storage device. Swidler, however, teaches that about repeating the data transfer process when the next available media storage device does not have capacity to record remaining portions of the stream of data, until the stream of data is fully recorded (e.g. see Col. 5, lines 25+). In other words, Swidler has to monitor a performance parameter, i.e. determining the available storage space of the storage device in order to determine that the next available media storage device does not have capacity to record remaining portions of the stream of data. Accordingly, it would have

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been obvious to one of ordinary skill in the art at the time of the current invention was made to implement Swidler's teachings in the storage device taught by BOI so if the current storage device does not have enough capacity (i.e. free space) to store the stream of data, it would be stored in the next available storage device until the stream of data is fully recorded.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hetul Patel whose telephone number is 571-272-4184. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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